PATENT COOPERATION TREATY

TRANSLATION

From the
INTERNATIONAL SEARCHING AUTHORITY

To:

PCT

WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY

(PCT Rule 43*bis*.1)

	Date of mailing *(day/month/year)*
Applicant's or agent's file reference 2F04158-PCT	FOR FURTHER ACTION See paragraph 2 below

International application No.	International filing date *(day/month/year)*	Priority date *(day/month/year)*
PCT/JP2004/015790	25.10.2004	07.11.2003

International Patent Classification (IPC) or both national classification and IPC

Applicant
MATSUSHITA ELECTRIC INDUSTRIAL CO., LTD.

1. This opinion contains indications relating to the following items:

☒	Box No. I	Basis of the opinion
☐	Box No. II	Priority
☐	Box No. III	Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
☐	Box No. IV	Lack of unity of invention
☒	Box No. V	Reasoned statement under Rule 43*bis*.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
☐	Box No. VI	Certain documents cited
☐	Box No. VII	Certain defects in the international application
☐	Box No. VIII	Certain observations on the international application

2. FURTHER ACTION

If a demand for international preliminary examination is made, this opinion will be considered to be a written opinion of the International Preliminary Examining Authority ("IPEA") except that this does not apply where the applicant chooses an Authority other than this one to be the IPEA and the chosen IPEA has notified the International Bureau under Rule 66.1*bis*(b) that written opinions of this International Searching Authority will not be so considered.

If this opinion is, as provided above, considered to be a written opinion of the IPEA, the applicant is invited to submit to the IPEA a written reply together, where appropriate, with amendments, before the expiration of 3 months from the date of mailing of Form PCT/ISA/220 or before the expiration of 22 months from the priority date, whichever expires later.

For further options, see Form PCT/ISA/220.

3. For further details, see notes to Form PCT/ISA/220.

Name and mailing address of the ISA/JP Facsimile No.	Authorized officer Telephone No.

WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY

International application No.
PCT/JP2004/015790

Box No. I Basis of this opinion

1. With regard to the language, this opinion has been established on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.

   ☐ This opinion has been established on the basis of a translation from the original language into the following language _____, which is the language of a translation furnished for the purposes of international search (under Rule 12.3 and 23.1(b)).

2. With regard to any nucleotide and/or amino acid sequence disclosed in the international application and necessary to the claimed invention, this opinion has been established on the basis of:

   a. type of material

      ☐ a sequence listing

      ☐ table(s) related to the sequence listing

   b. format of material

      ☐ in written format

      ☐ in computer readable form

   c. time of filing/furnishing

      ☐ contained in the international application as filed.

      ☐ filed together with the international application in computer readable form.

      ☐ furnished subsequently to this Authority for the purposes of search.

3. ☐ In addition, in the case that more than one version or copy of a sequence listing and/or table(s) relating thereto has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished.

4. Additional comments:

WRITTEN OPINION OF THE
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International application No.
PCT/JP2004/015790

Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N)	Claims	1-4	YES
	Claims		NO
Inventive step (IS)	Claims	1-4	YES
	Claims		NO
Industrial applicability (IA)	Claims	1-4	YES
	Claims		NO

2. Citations and explanations:

Document 1: JP 2003-259437 A (Matsushita Electric Industrial Co., Ltd.), 12 September 2003, paragraphs 0081-0086, 0110-0116, Fig. 1, Fig. 3, Fig. 4, Fig. 10, Fig. 11

Document 2: JP 2003-298498 A (NEC Corp.), 17 October 2003, paragraphs 0038-0050, Fig. 5, Fig. 7 & WO 2003/084099 A1 & JP 2003-318861 A

Document 3: JP 2003-198426 A (Mitsubishi Electric Corp.), 11 July 2003, paragraphs 0016, 0021-0024, 0052-0053, 0056-0057, Fig. 7, Fig. 8

Document 1 describes art wherein, when the difference between the received CIR and the previous CIR is small, the threshold value for deciding the MCS level is slightly corrected, and when the difference is large, the threshold value is greatly corrected, and describes art wherein, when the Doppler frequency is high, the threshold value for deciding the MCS level is greatly corrected, and when the Doppler frequency is small, the threshold value is slightly corrected.

Document 2 describes art wherein, if the reception quality of a shared pilot channel fluctuates above a predetermined value, the shared pilot channel is used for predicting quality, and if the fluctuation is within a predetermined value, an individual control channel is used for predicting quality, and the MCS level is determined based on the quality prediction results.

Document 3 describes art wherein, when the Doppler frequency is high, a slightly modulated multivalue number is selected, and when the Doppler frequency is low, a highly modulated multivalue number is selected.

The inventions of claims 1-4 pertain to art wherein, when the level difference between a provisionally found MCS level and the MCS level used during the previous control is within a predetermined fluctuation range, the provisionally found MCS level is chosen, and when the level difference exceeds the fluctuation range described above, the MCS level is determined with the level difference vis-à-vis the MCS level used during the previous control limited to the fluctuation range described above. This is not described in any of documents 1-3 cited in the ISR and is not obvious to a person skilled in the art.